

Abstract of the Disclosure

Methods of making Apo-2 ligand and formulations of Apo-2 ligand using divalent metal ions are provided. Such divalent metal ions include zinc and cobalt which improve Apo-2 ligand trimer formation and stability. The crystal structure of Apo-2 ligand is also provided, along with Apo-2 ligand variant polypeptides identified using oligonucleotide-directed mutagenesis.